

CLAIMS

- Sub. B¹ AT >
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1. Use of an aqueous solution in the preparation of an irrigating medium for use in the treatment of root canals, the aqueous solution being characterised in that it is electro-chemically activated.
2. The use as claimed in claim 1, wherein the electro-chemically activated aqueous solution includes an aqueous anion-containing and an aqueous cation-containing solution.
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3. The use as claimed in claim 2, wherein the aqueous anion-containing solution and the aqueous cation-containing solution are prepared by means of electrolysis of an aqueous solution of a salt.
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4. The use as claimed in any one of the preceding claims wherein the anion-containing and the cation-containing solution are produced by an electro-chemical reactor comprising a through-flow, electro-chemical cell having two co-axial electrodes with a co-axial diaphragm between them so as to separate an annular inter-electrode space into cathodic and anodic chambers.
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5. The use as claimed in any one of the preceding claims wherein the

anion-containing solution is produced from a 10% aqueous NaCl solution, electrolysed to produce activated or excited radical cation and radical anion species, the anion-containing solution having an extremely high redox potential of up to about +1170 mV.

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6. The use as claimed in claim 5 wherein the anion-containing solution has a pH of about 2-7 and a redox potential of about +1170 mV.

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The use as claimed in claim 5 wherein the cation-containing solution has a pH of up to about 7-13 and a redox potential of about -980 mV.

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An irrigating medium for irrigating root canals, the irrigating medium comprising an electro-chemically activated, aqueous saline solution.

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A method for irrigating root canals including the step of applying an electro-chemically activated, aqueous saline solution to a root canal for irrigation purposes.

10. The method as claimed in claim 9 including the steps of first applying cation-containing solution to the root canal, aimed at removing organic film and debris covering the inner walls of the root canal, and thereafter applying an anion-containing solution to the root canal, aimed at disinfecting the inner walls of the root canal and dentinal tubules.

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